

# Mineral Industry Surveys

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## COPPER IN FEBRUARY 2005

Average daily mine production in February rose by about 2% from January's low level and was about 11% above the average daily production in February 2004, according to data compiled by the U.S. Geological Survey. Production remained well below the levels experienced in the fourth quarter of 2003, however, owing to the dampening effect of heavy rainfall. (See Copper in January 2005.) Average daily consumption of refined copper rose by 17% in February but remained almost 9% below consumption in February 2004. Consumption for the first 2 months of 2005 was 16% below that for the comparative period in 2004. According to data compiled by the American Bureau of Metal Statistics, Inc. (2005), U.S. apparent consumption of wire rod for the first 2 months of 2005 was down by 3.6% from that of the equivalent period in 2004. Net imports of 34,000 metric tons (t) for January and February were up by about 95% compared with those for the equivalent period in 2004.

Russian imports of wire rod have been entering the United States duty-free under the General System of Preferences (GSP) program. In 2004, the U.S. Census Bureau reported that the value of Russian wire-rod imports totaled \$132 million, and therefore exceeded the threshold limit of \$115 million allowable under the GSP program. As a result, wire-rod imports from Russia were expected to lose their duty-free status effective July 1, 2005, and would then be subject to a 3% ad valorem tariff. In 2003, Russia had been the second leading source of U.S. wire-rod imports, behind Canada, but fell to third behind Mexico in 2004. Russian imports rose dramatically during the first 2 months of 2005 to almost 17,000 t, nearly one-half of total Russian imports for full-year 2004.

Consolidation of the North American copper industry continued when Noranda Inc. and Falconbridge Ltd. announced that they would combine the assets of the two companies under the name NorandaFalconbridge by way of a "share exchange take-over bid by Noranda." Noranda already owned 58.8% of Falconbridge. Each Falconbridge shareholder would receive 1.77 Noranda shares for each Falconbridge share, which represented a 15% premium based on the 20-day average share prices for the period ending March 20. Prior to the merger, Noranda intended to repurchase 63.4 million of its

common shares, in exchange for three series of junior preferred shares, with an aggregate stated value of \$1.25 billion.

Brascan Corporation, an asset management company, which owned 41% of Noranda's common shares, indicated that it would tender its common shares. Upon completion of the merger, Brascan's share of the combined company would fall to between 16% and 26% (Noranda Inc., 2005). The merged entity would have a production capacity of more than 550,000 metric tons per year (t/yr) of refined copper, 530,000 t/yr of zinc, and 100,000 t/yr of nickel, and a fully integrated aluminum unit. The two companies already held joint interests in the Kidd Creek Mine and metallurgical facilities in Canada, and in the Collahuasi and Lomas Bayas mines in Chile.

Brascan had been trying to sell its stake in Noranda by encouraging either the Brazilian mining company, Companhia Vale do Rio Doce, or the State-owned Chinese metals company, China Minmetals, to take control of Noranda. In November 2004, Noranda broke off an exclusive negotiation period with Minmetals. Brascan reportedly wanted to divest its interest in Noranda in order to invest in commercial interests offering greater returns (Platts Metals Week, 2005).

In a second industry consolidation, BHP Billiton (United Kingdom-Australia) announced that the board of directors of WMC Resources (Australia) had recommended that its shareholders accept a takeover offer from BHP Billiton of A\$7.85 per share for the entire issued capital of WMC, thus ending a bid for control of WMC by Xstrata plc (Australia). Though its cash bid was eventually raised to A\$7.00 per share, Xstrata placed WMC into play in October 2004 when it offered A\$6.25 per share for WMC. The principal asset in the acquisition was WMC's Olympic Mine Dam (Australia), the world's fourth largest identified copper resource, one of the world's ten largest gold deposits, and a major producer of uranium ore. BHP Billiton already holds a majority interest in Escondida (Chile), the world's leading copper producer and owner of the largest resource (BHP Billiton, 2005).

## References Cited

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TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES<sup>1</sup>

(Metric tons, unless otherwise specified)

	Source table <sup>2</sup>	2004 <sup>P</sup>	2005		January - February
			January	February	
Production:					
Primary:					
Mine, recoverable	(2)	1,160,000	97,700	90,500	188,000
Refinery:					
Electrolytic:					
Domestic and foreign	(4)	671,000	54,900 <sup>r</sup>	57,400	112,000
Electrowon	(4)	584,000	42,200 <sup>r</sup>	40,500	82,700
Total	(4)	1,260,000	97,000 <sup>r</sup>	97,900	195,000
Secondary recoverable copper:					
Refineries	(5)	50,800	4,380	4,380	8,760
Ingot makers <sup>3</sup>	(5)	91,800 <sup>r</sup>	7,650 <sup>r</sup>	7,650	15,300
Brass and wire-rod mills	(5)	705,000	60,400	58,200	119,000
Foundries, etc. <sup>3</sup>	(5)	65,200 <sup>r</sup>	5,430 <sup>r</sup>	5,430	10,900
Smelter, total	(3)	542,000	42,700	36,100	78,800
Consumption:					
Apparent	(8)	2,570,000 <sup>r</sup>	181,000	NA	NA
Refined (reported)	(7)	2,410,000 <sup>r</sup>	167,000 <sup>r</sup>	177,000	344,000
Purchased copper-base scrap	(9)	1,150,000 <sup>r</sup>	98,000 <sup>r</sup>	95,800	194,000
Stocks at end of period:					
Total refined	(11)	136,000 <sup>r</sup>	142,000 <sup>r</sup>	135,000	XX
Blister, etc.	(11)	51,400	66,100 <sup>r</sup>	46,700	XX
Prices:					
U.S. producer cathode (cents per pound) <sup>4</sup>	(12)	133.938	150.261	151.905	151.083
Imports: <sup>5</sup>					
Ores and concentrates <sup>6</sup>	(14)	22,900	--	NA	NA
Refined	(14)	807,000	85,200	NA	NA
Exports: <sup>5</sup>					
Ores and concentrates <sup>6</sup>	(15)	24,200	12,000	NA	NA
Refined	(15)	118,000	4,460	NA	NA

<sup>P</sup>Preliminary. <sup>r</sup>Revised. NA Not available. XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

<sup>2</sup>Numbers in parentheses refer to the significant tables where these data are located.

<sup>3</sup>Monthly data and 2004 cumulative data estimated based on 2003 monthly average.

<sup>4</sup>Source: Platts Metals Week.

<sup>5</sup>Source: U.S. Census Bureau.

<sup>6</sup>Copper content.

TABLE 2  
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others <sup>2</sup>	Total	Electrowon	Concentrates <sup>3</sup>	Total
<b>2004:<sup>P</sup></b>						
January - February	113,000 <sup>r</sup>	61,900 <sup>r</sup>	175,000 <sup>r</sup>	93,400	84,300 <sup>r</sup>	178,000
February	55,000	29,600	84,600	44,700	41,100	85,800
March	61,300	31,500	92,700	48,400	45,700	94,100
April	55,400	31,600	87,100	47,600	40,600	88,200
May	56,800	34,100	90,900	49,100	42,900	92,000
June	59,200	33,500	92,800	49,400	44,600	94,100
July	62,000	38,100	100,000	50,700	50,900	102,000
August	62,800	36,200	99,000	49,300	51,200	100,000
September	62,800	36,400	99,200	49,800	50,800	101,000
October	64,200	39,400	104,000	48,900	56,300	105,000
November	61,400	46,500	108,000	47,600	62,100	110,000
December	63,300	45,200	109,000	50,000	60,300	110,000
Year	723,000	435,000	1,160,000	584,000	590,000	1,170,000
<b>2005:</b>						
January	58,300	39,400	97,700	42,200 <sup>r</sup>	57,300 <sup>r</sup>	99,500 <sup>r</sup>
February	53,800	36,700	90,500	40,500	51,500	92,100
January - February	112,000	76,100	188,000	82,700	109,000	192,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes production from Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>3</sup>Includes copper content of precipitates and other metal concentrates.

TABLE 3  
COPPER PRODUCED AT SMELTERS IN  
THE UNITED STATES, BY SOURCE<sup>1,2</sup>

(Metric tons, copper content)

Period	Anode production
<b>2004:<sup>P</sup></b>	
January - February	69,800
February	30,100
March	41,300
April	44,400
May	52,900
June	46,500
July	46,500
August	51,300
September	48,000
October	49,200
November	42,300
December	49,900
January - December	542,000
<b>2005:</b>	
January	42,700
February	36,100
January - February	78,800

<sup>P</sup>Preliminary.

<sup>1</sup>Includes blister, anode and copper from primary or secondary sources.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to total shown.

TABLE 4  
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY<sup>1</sup>

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined <sup>2</sup>	Electrowon	Total		
2004: <sup>P</sup>					
January - February	102,000 <sup>r</sup>	93,400	195,000 <sup>r</sup>	8,110	203,000 <sup>r</sup>
February	50,300	44,700	95,000	3,920	98,900
March	52,300	48,400	101,000	4,330	105,000
April	59,000	47,600	107,000	4,360	111,000
May	55,600	49,100	105,000	4,150	109,000
June	58,900	49,400	108,000	4,460	113,000
July	49,200	50,700	99,900	4,080	104,000
August	53,400	49,300	103,000	3,870	107,000
September	57,700	49,800	108,000	4,660	112,000
October	57,400	48,900	106,000	4,540	111,000
November	56,700	47,600	104,000	4,190	109,000
December	69,300	50,000	119,000	4,010	123,000
Year	671,000	584,000	1,260,000	50,800	1,310,000
2005:					
January	54,900 <sup>r</sup>	42,200 <sup>r</sup>	97,000 <sup>r</sup>	4,380	101,000 <sup>r</sup>
February	57,400	40,500	97,900	4,380	102,000
January - February	112,000	82,700	195,000	8,760	204,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>From domestic and foreign source materials.

TABLE 5  
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP<sup>1</sup>

(Metric tons, copper content)

Period	Refineries <sup>2</sup>		Ingot makers <sup>3</sup>		Brass and wire-rod mills		Foundries, etc. <sup>3</sup>		Total <sup>4</sup>
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2004: <sup>P</sup>									
January - February	2,670	5,440	2,790 <sup>r</sup>	12,500 <sup>r</sup>	114,000 <sup>r</sup>	7,510	4,120 <sup>r</sup>	6,740 <sup>r</sup>	156,000 <sup>r</sup>
February	1,340	2,590	1,390 <sup>r</sup>	6,260 <sup>r</sup>	56,600	3,900	2,060 <sup>r</sup>	3,370 <sup>r</sup>	77,500 <sup>r</sup>
March	1,340	3,000	1,390 <sup>r</sup>	6,260 <sup>r</sup>	60,100	3,650	2,060 <sup>r</sup>	3,370 <sup>r</sup>	81,200 <sup>r</sup>
April	1,340	3,020	1,390 <sup>r</sup>	6,260 <sup>r</sup>	60,500	2,900	2,060 <sup>r</sup>	3,370 <sup>r</sup>	80,800 <sup>r</sup>
May	1,340	2,820	1,390 <sup>r</sup>	6,260 <sup>r</sup>	54,600	3,090	2,060 <sup>r</sup>	3,370 <sup>r</sup>	74,900 <sup>r</sup>
June	1,340	3,120	1,390 <sup>r</sup>	6,260 <sup>r</sup>	55,900	2,910	2,060 <sup>r</sup>	3,370 <sup>r</sup>	76,300 <sup>r</sup>
July	1,340	2,740	1,390 <sup>r</sup>	6,260 <sup>r</sup>	56,400	2,440	2,060 <sup>r</sup>	3,370 <sup>r</sup>	76,000 <sup>r</sup>
August	1,340	2,540	1,390 <sup>r</sup>	6,260 <sup>r</sup>	56,800	2,450	2,060 <sup>r</sup>	3,370 <sup>r</sup>	76,200 <sup>r</sup>
September	1,340	3,320	1,390 <sup>r</sup>	6,260 <sup>r</sup>	55,200	2,690	2,060 <sup>r</sup>	3,370 <sup>r</sup>	75,600 <sup>r</sup>
October	1,340	3,210	1,390 <sup>r</sup>	6,260 <sup>r</sup>	56,800	2,670	2,060 <sup>r</sup>	3,370 <sup>r</sup>	77,100 <sup>r</sup>
November	1,340	2,850	1,390 <sup>r</sup>	6,260 <sup>r</sup>	50,500	2,670	2,060 <sup>r</sup>	3,370 <sup>r</sup>	70,500 <sup>r</sup>
December	1,340	2,680	1,390 <sup>r</sup>	6,260 <sup>r</sup>	48,000	3,300	2,060 <sup>r</sup>	3,370 <sup>r</sup>	68,400 <sup>r</sup>
Year	16,000	34,700	16,700 <sup>r</sup>	75,100 <sup>r</sup>	669,000	36,300	24,700 <sup>r</sup>	40,400 <sup>r</sup>	913,000 <sup>r</sup>
2005:									
January	1,340	3,050	1,390 <sup>r</sup>	6,260 <sup>r</sup>	57,700	2,780	2,060 <sup>r</sup>	3,370 <sup>r</sup>	77,900 <sup>r</sup>
February	1,340	3,040	1,390	6,260	55,100	3,110	2,060	3,370	75,700
January - February	2,670	6,090	2,790	12,500	113,000	5,900	4,120	6,740	154,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Electrolytically refined and fire-refined scrap based on source of material at smelter level.

<sup>3</sup>Monthly data and 2004 cumulative data estimated based on 2003 annual data.

<sup>4</sup>Does not include an estimate, based on reported 2003 data of 3,040 tons per month from new scrap and 1,830 tons per month of copper recovered from scrap other than copper-base.

TABLE 6  
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES<sup>1</sup>

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2004: <sup>P</sup>						
January - February	231,000 <sup>r</sup>	304,000 <sup>r</sup>	235,000 <sup>r</sup>	298,000 <sup>r</sup>	XX	XX
February	117,000	146,000	119,000	147,000	52,200	28,500
March	124,000	158,000	124,000	168,000	51,300	19,100
April	125,000	159,000	124,000	160,000	52,400	18,300
May	115,000	160,000	116,000	148,000	51,400	29,600
June	118,000	143,000	117,000	148,000	52,700	23,900
July	118,000	143,000	117,000	144,000	54,100	23,900
August	119,000	162,000	118,000	156,000	54,700	29,500
September	113,000	154,000	113,000	148,000	54,500	35,600
October	120,000	135,000	120,000	148,000	54,400	23,000
November	107,000	148,000	108,000	144,000	52,900	26,600
December	100,000	134,000	97,600	130,000	55,300	31,200
Year	1,390,000	1,800,000	1,390,000	1,790,000	XX	XX
2005:						
January	113,000	141,000	114,000	137,000	55,100	35,100
February	109,000	135,000	110,000	134,000	53,300	35,100
January - February	222,000	276,000	224,000	272,000	XX	XX

<sup>P</sup>Preliminary. <sup>r</sup>Revised. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7  
CONSUMPTION OF REFINED COPPER<sup>1</sup>

(Metric tons)

Period and item	Brass mills	Wire-rod mills	Other plants <sup>2</sup>	Total
2004: <sup>P</sup>				
January - February <sup>r</sup>	97,500	302,000	10,300	410,000
February	49,600	146,000	5,160 <sup>r</sup>	201,000
March	54,300	158,000	5,160 <sup>r</sup>	218,000
April	52,400	158,000	5,160 <sup>r</sup>	216,000
May	45,300	156,000	5,160 <sup>r</sup>	207,000
June	46,000	136,000	5,160 <sup>r</sup>	187,000 <sup>r</sup>
July	50,900	142,000	5,160 <sup>r</sup>	198,000 <sup>r</sup>
August	48,500	165,000	5,160 <sup>r</sup>	218,000 <sup>r</sup>
September	46,100	151,000	5,160 <sup>r</sup>	202,000 <sup>r</sup>
October	48,200	136,000	5,160 <sup>r</sup>	190,000
November	44,700	145,000	5,160 <sup>r</sup>	195,000
December	39,200	129,000	5,160 <sup>r</sup>	173,000 <sup>r</sup>
Year	573,000	1,780,000	61,900 <sup>r</sup>	2,410,000 <sup>r</sup>
2005:				
January	44,900	145,000	5,160 <sup>r</sup>	167,000 <sup>r</sup>
February:				
Cathodes	28,900	129,000	881	159,000
Wire bars	--	--	(3)	(3)
Ingot and ingot bars	1,920	--	1,760	3,690
Cakes and slabs	(3)	--	(3)	(3)
Billets and other	11,600	W	2,510	14,100
Total	42,500	129,000	5,160	177,000
January - February	87,300	274,000	10,300	344,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data included with "Cathodes." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2003 annual data.

<sup>3</sup>Withheld to avoid disclosing company proprietary data; included with "Billets and others."

TABLE 8  
U.S. APPARENT CONSUMPTION OF COPPER<sup>1</sup>

(Metric tons)

Period	Refined copper production	Copper in old scrap <sup>2</sup>	Refined general imports <sup>3</sup>	Refined exports <sup>3</sup>	Stock change during period	Apparent consumption
2004: <sup>P</sup>						
January - February	195,000 <sup>r</sup>	35,800 <sup>r</sup>	89,100	29,500	(141,000) <sup>r</sup>	431,000
February	95,000	17,900 <sup>r</sup>	45,400	18,500	(63,600)	203,000 <sup>r</sup>
March	101,000	18,100 <sup>r</sup>	62,500	23,900	(94,900)	252,000 <sup>r</sup>
April	107,000	17,300 <sup>r</sup>	54,100	28,400	(90,000)	240,000 <sup>r</sup>
May	105,000	17,300 <sup>r</sup>	56,300	3,700	(36,600)	211,000 <sup>r</sup>
June	108,000	17,400 <sup>r</sup>	40,400	2,720	(58,900)	222,000 <sup>r</sup>
July	99,900	16,600 <sup>r</sup>	75,600	5,470	(22,800)	209,000 <sup>r</sup>
August	103,000	16,400 <sup>r</sup>	65,500	9,350	(33,200)	208,000 <sup>r</sup>
September	108,000	17,400 <sup>r</sup>	73,800	570	(23,100)	221,000 <sup>r</sup>
October	106,000	17,300 <sup>r</sup>	60,200	3,890	(12,400)	192,000 <sup>r</sup>
November	104,000	16,900 <sup>r</sup>	75,300	2,460	(7,870)	202,000 <sup>r</sup>
December	119,000	17,400 <sup>r</sup>	51,100	8,390	(749)	180,000 <sup>r</sup>
Year	1,260,000	208,000 <sup>r</sup>	704,000	118,000	(521,000)	2,570,000 <sup>r</sup>
2005:						
January	97,000 <sup>r</sup>	17,200 <sup>r</sup>	77,900	4,460	6,290 <sup>r</sup>	181,000
February	97,900	17,600	NA	NA	(7,100)	NA
January	97,000	17,500	77,900	4,460	6,290	181,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised. NA Not available.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2003 data.

<sup>3</sup>Source: U.S. Census Bureau.

TABLE 9  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP<sup>1</sup>

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers <sup>2</sup>		Brass and wire-rod mills <sup>3</sup>		Foundries, etc. <sup>2</sup>		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2004: <sup>P</sup>									
January - February	2,700	5,490	3,700 <sup>r</sup>	18,200 <sup>r</sup>	143,000	7,750	7,200 <sup>r</sup>	7,400 <sup>r</sup>	195,000 <sup>r</sup>
February	1,350	2,610	1,850 <sup>r</sup>	9,110 <sup>r</sup>	70,800	4,020	3,600 <sup>r</sup>	3,700 <sup>r</sup>	97,100 <sup>r</sup>
March	1,350	3,020	1,850 <sup>r</sup>	9,110 <sup>r</sup>	75,900	3,760	3,600 <sup>r</sup>	3,700 <sup>r</sup>	102,000 <sup>r</sup>
April	1,350	3,050	1,850 <sup>r</sup>	9,110 <sup>r</sup>	75,400	2,930	3,600 <sup>r</sup>	3,700 <sup>r</sup>	101,000 <sup>r</sup>
May	1,350	2,770	1,850 <sup>r</sup>	9,110 <sup>r</sup>	68,500	3,200	3,600 <sup>r</sup>	3,700 <sup>r</sup>	94,100 <sup>r</sup>
June	1,350	3,150	1,850 <sup>r</sup>	9,110 <sup>r</sup>	70,900	3,040	3,600 <sup>r</sup>	3,700 <sup>r</sup>	96,700 <sup>r</sup>
July	1,350	2,760	1,850 <sup>r</sup>	9,110 <sup>r</sup>	71,100	2,620	3,600 <sup>r</sup>	3,700 <sup>r</sup>	96,100 <sup>r</sup>
August	1,350	2,550	1,850 <sup>r</sup>	9,110 <sup>r</sup>	72,600	2,580	3,600 <sup>r</sup>	3,700 <sup>r</sup>	97,400 <sup>r</sup>
September	1,350	3,290	1,850 <sup>r</sup>	9,110 <sup>r</sup>	70,300	2,820	3,600 <sup>r</sup>	3,700 <sup>r</sup>	96,000 <sup>r</sup>
October	1,350	3,230	1,850 <sup>r</sup>	9,110 <sup>r</sup>	71,500	2,810	3,600 <sup>r</sup>	3,700 <sup>r</sup>	97,200 <sup>r</sup>
November	1,350	2,890	1,850 <sup>r</sup>	9,110 <sup>r</sup>	63,300	2,780	3,600 <sup>r</sup>	3,700 <sup>r</sup>	88,500 <sup>r</sup>
December	1,350	2,700	1,850 <sup>r</sup>	9,110 <sup>r</sup>	60,300	3,440	3,600 <sup>r</sup>	3,700 <sup>r</sup>	86,000 <sup>r</sup>
Year	16,200	34,900	22,200 <sup>r</sup>	109,000 <sup>r</sup>	843,000	37,700	43,200 <sup>r</sup>	44,400 <sup>r</sup>	1,150,000 <sup>r</sup>
2005:									
January	1,350	3,080	1,850 <sup>r</sup>	9,110 <sup>r</sup>	72,400	2,910	3,600 <sup>r</sup>	3,700 <sup>r</sup>	98,000 <sup>r</sup>
February	1,350	3,080	1,850	9,110	69,800	3,280	3,600	3,700	95,800
January - February	2,700	6,160	3,700	18,200	142,000	6,190	7,200	7,400	194,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Monthly data and 2004 cumulative data estimated from 2003 annual data.

<sup>3</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP<sup>1,2</sup>

(Metric tons, gross weight)

Scrap type and processor	2004 <sup>P</sup>			2005		
	January - February	December	Year	January	February	January - February
No. 1 wire and heavy:						
Smelters and refiners	11,400 <sup>r</sup>	5,690 <sup>r</sup>	68,200 <sup>r</sup>	5,690	5,690	11,400
Brass and wire-rod mills	69,800 <sup>r</sup>	29,600	394,000	34,100	31,500	65,500
No. 2 mixed heavy and light:						
Smelters and refiners	4,200 <sup>r</sup>	2,060 <sup>r</sup>	27,200 <sup>r</sup>	2,440	2,440	4,870
Brass and wire-rod mills	1,410	433	6,250	490	488	978
Total unalloyed scrap:						
Smelters and refiners	15,600 <sup>r</sup>	7,740 <sup>r</sup>	95,400 <sup>r</sup>	8,120	8,120	16,200
Brass and wire-rod mills	71,200 <sup>r</sup>	30,100	401,000	34,600	32,000	66,500
Red brass: <sup>3</sup>						
All plants	6,570 <sup>r</sup>	2,900 <sup>r</sup>	38,900 <sup>r</sup>	3,240	3,080	6,320
Leaded yellow brass:						
All plants	52,900 <sup>r</sup>	23,100 <sup>r</sup>	323,000	14,900	16,900	31,800
Yellow and low brass:						
All plants	6,700 <sup>r</sup>	3,280 <sup>r</sup>	40,100 <sup>r</sup>	15,300	14,600	29,900
Cartridge cases and brass:						
All plants	14,500 <sup>r</sup>	5,880 <sup>r</sup>	86,600 <sup>r</sup>	8,370	7,660	16,000
Auto radiators:						
Smelters and refiners	4,290 <sup>r</sup>	2,150 <sup>r</sup>	25,700 <sup>r</sup>	2,150	2,150	4,290
Bronzes:						
Smelters and refiners	1,330 <sup>r</sup>	667 <sup>r</sup>	8,010 <sup>r</sup>	667	667	1,330
Brass mills	969	481	6,350	457	396	853
Nickel-copper alloys:						
All plants	3,200 <sup>r</sup>	982 <sup>r</sup>	20,000	1,470	1,330	2,800
Low grade and residues:						
Smelters and refiners	2,100 <sup>r</sup>	1,050 <sup>r</sup>	12,600 <sup>r</sup>	1,050	1,050	2,100
Other alloy scrap: <sup>4</sup>						
Smelters and refiners	184 <sup>r</sup>	92 <sup>r</sup>	1,100 <sup>r</sup>	92	92	184
Brass mills	1,030	332	4,860	359	477	836
Total alloyed scrap:						
Smelters and refiners	14,500 <sup>r</sup>	7,260 <sup>r</sup>	87,200 <sup>r</sup>	7,260	7,260	14,500
Brass mills	79,300	33,700	480,000	40,800	41,200	81,900
Total scrap:						
Smelters and refiners	30,100 <sup>r</sup>	15,000 <sup>r</sup>	183,000 <sup>r</sup>	15,400	15,400	30,800
Brass and wire-rod mills	150,000 <sup>r</sup>	63,700	880,000	75,300	73,100	148,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 7,300 tons of scrap per month based on 2003 annual data; monthly data include estimates of about 11,000 tons of scrap per month consumed by ingot makers.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

<sup>4</sup>Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.



TABLE 11  
COPPER STOCKS AT END OF PERIOD<sup>1</sup>

(Metric tons)

Period	Crude copper <sup>2</sup>	Refined copper					LME <sup>6</sup>	Total refined
		Refineries <sup>3</sup>	Wire-rod mills <sup>3</sup>	Brass mills <sup>3</sup>	Other <sup>4</sup>	Comex <sup>5</sup>		
2004: <sup>P</sup>								
February	48,100	10,100	25,200	16,300	4,870 <sup>r</sup>	219,000	240,000	516,000 <sup>r</sup>
March	43,200	10,800	30,700	14,200	4,870 <sup>r</sup>	193,000	167,000	421,000 <sup>r</sup>
April	62,900	8,510	19,100	16,700	4,870 <sup>r</sup>	156,000	126,000	331,000 <sup>r</sup>
May	69,100	11,100	27,500	18,000	4,870 <sup>r</sup>	120,000	114,000	295,000 <sup>r</sup>
June	60,600	5,680	26,600	19,600	4,870 <sup>r</sup>	86,300	92,800	236,000 <sup>r</sup>
July	62,200	6,780	29,700	19,100	4,870 <sup>r</sup>	71,700	80,800	213,000 <sup>r</sup>
August	65,700	8,640	21,400	22,600	4,870 <sup>r</sup>	55,900	66,400	180,000 <sup>r</sup>
September	71,600	7,830	15,200	24,900	4,870 <sup>r</sup>	44,900	59,000	157,000 <sup>r</sup>
October	72,200	9,210	25,200	20,300	4,870 <sup>r</sup>	41,300	43,400	144,000 <sup>r</sup>
November	70,600	13,100	24,300	18,200	4,870 <sup>r</sup>	38,500	37,500	136,000 <sup>r</sup>
December	51,400	10,300	20,300	21,500	4,870 <sup>r</sup>	43,700	35,000	136,000 <sup>r</sup>
2005:								
January	66,100 <sup>r</sup>	12,300 <sup>r</sup>	24,300 <sup>r</sup>	24,000	4,870 <sup>r</sup>	41,600	34,900	142,000 <sup>r</sup>
February	46,700	10,600	20,800	22,200	4,870	42,500	33,900	135,000

<sup>P</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Copper content of blister and other materials in transit and in process of refining.

<sup>3</sup>Stocks of refined copper as reported; no estimates are made for nonrespondents.

<sup>4</sup>Monthly estimates based on reported and 2003 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

<sup>5</sup>Commodity Exchange Inc., New York.

<sup>6</sup>London Metal Exchange Ltd., U.S. warehouses.

TABLE 12  
AVERAGE PRICE OF COPPER IN THE UNITED STATES  
AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode <sup>1</sup>	Comex first position <sup>2</sup>	LME cash price Grade A
2004:			
February	129.302	125.116	125.144
March	138.323	134.137	136.439
April	133.646	128.481	133.694
May	126.097	120.968	123.960
June	126.008	120.862	121.832
July	132.078	126.812	127.342
August	133.015	127.752	129.064
September	136.680	131.414	131.283
October	140.273	135.007	136.575
November	146.599	141.333	141.620
December	150.897	145.631	142.633
Year	133.938	128.972	129.958
2005:			
January	150.261	144.995	143.751
February	151.905	146.639	147.544
January - February	151.083	145.817	145.648

<sup>1</sup>Listed as "U.S. producer cathode."

<sup>2</sup>Listed as "Comex high grade first position."

Sources: Platts Metals Week and American Metal Market.

TABLE 13  
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 Scrap	Red brass turnings and borings
2004:				
February	124.08	112.66	75.84	52.37
March	132.89	118.57	91.00	60.30
April	127.30	107.18	90.91	58.82
May	119.65	96.28	89.00	55.00
June	119.82	96.55	89.00	55.00
July	125.52	101.33	89.00	55.00
August	126.64	101.73	89.00	55.00
September	127.29	106.19	89.00	55.00
October	130.43	113.38	89.00	55.00
November	135.40	118.15	89.00	55.00
December	139.14	121.00	89.00	55.00
Year	126.41	107.62	86.86	55.14
2005:				
January	139.40	119.50	89.00	55.00
February	139.89	121.67	89.00	55.00
January - February	139.65	120.59	89.00	55.00

Source: American Metal Market.

TABLE 14  
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS<sup>1</sup>

(Metric tons, copper content)

Country or territory	Ore and concentrate		Matte, ash and precipitates		Blister and anodes		Refined	
	2005		2005		2005		2005	
	2004	January	2004	January	2004	January	2004	January
Brazil	--	--	--	--	--	--	15,600	3,040
Canada	516	--	99	--	75,500	7,790	278,000	28,600
Chile	--	--	--	--	48,900	3,580	311,000	36,400
Germany	--	--	--	--	--	--	21,000	3,800
Japan	--	--	(2)	--	19	--	4,380	280
Mexico	22,400	--	206	17	8,630	1,390	19,300	--
Namibia	--	--	--	--	7,710	--	--	--
Peru	--	--	--	--	10,200	--	152,000	8,940
Taiwan	--	--	1,330	78	--	--	(2)	--
Other	--	--	45	1	16 <sup>1</sup>	--	6,120 <sup>1</sup>	4,070
Total	22,900	--	1,680	96	151,000	12,800	807,000	85,200

<sup>1</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 15  
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS<sup>1</sup>

(Metric tons, copper content)

Country or territory	Ore and concentrate		Matte, ash and precipitates		Blister and anodes		Refined	
	2005		2005		2005		2005	
	2004	January	2004	January	2004	January	2004	January
Belgium	6	39	45	--	1,320	344	998	--
Canada	18,200	1,680	18,800	2,120	22,400	1,970	2,230	304
China	2,340	5,570	52	360	307	40	23,900	1,340
Costa Rica	--	3	--	--	--	--	1,300	--
Germany	32	--	23	5	1,880	100	70	--
Hong Kong	229	--	12	--	3,410	187	11	--
India	56	20	21	--	164	26	2,940	627
Italy	--	--	--	--	1,570	228	21,100	--
Japan	2,510	4,620	122	29	705	217	66	--
Korea, Republic of	23	--	8	--	8,910	33	5,060	19
Mexico	115	--	2,650	139	221	1	20,500	2,130
Netherlands	--	--	37	--	--	--	1,280	(2)
Saudi Arabia	--	--	--	--	--	--	7,840	--
Singapore	--	19	19	4	654	40	39	--
Sweden	--	--	--	--	399	643	3	--
Taiwan	109	--	5	--	1,320	160	29,000	--
United Arab Emirates	5	--	5	--	669	--	--	--
United Kingdom	37	--	87	--	474	17	590	14
Other	577	20	207 <sup>r</sup>	1	2,030 <sup>r</sup>	135	1,330 <sup>r</sup>	25
Total	24,200	12,000	22,100	2,650	46,400	4,140	118,000	4,460

<sup>r</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 16  
U.S. COPPER SCRAP TRADE<sup>1</sup>

(Metric tons, gross weight)

Country or territory	Imports				Exports						
	Unalloyed		Alloyed		Unalloyed				Alloyed		
	2005		2005		2005				2005		
	2004	January	2004	January	2004	No. 1 January	No. 2 January	Other January	2004	Segregated January	Unsegregated January
Bangladesh	--	--	--	--	--	--	--	--	--	349	--
Belgium	--	--	--	--	3,850	--	1	70	8,200	163	501
Canada	6,370	611	44,500	4,010	33,300	--	--	2,770	15,000	212	1,120
China	1	--	448	--	222,000	2,690	6,880	4,030	239,000	6,630	4,170
Costa Rica	1,400	123	516	25	--	--	--	--	--	--	--
Dominican Republic	446	58	432	94	--	--	--	--	--	--	--
Germany	48	3	1,130	--	8,830	143	181	915	13,800	698	843
Guatemala	271	16	1,050	109	--	--	--	--	--	--	--
Honduras	1,430	126	625	57	--	--	--	--	--	--	--
Hong Kong	1	--	--	--	3,910	69	136	12	11,000	61	511
India	--	--	--	--	4,160	85	44	121	45,100	1,220	232
Japan	65	2	145	12	7,930	--	283	347	9,660	516	249
Korea, Republic of	--	--	7	--	22,400	417	585	936	16,300	869	698
Malaysia	--	--	231	37	578	--	--	--	53	--	38
Mexico	10,300	685	22,100	1,960	4,560	--	162	108	1,570	1	18
Taiwan	--	--	1,480	18	11,300	55	401	216	13,700	603	511
United Kingdom	554	20	1,030	21	34	--	--	--	4,560	(2)	171
Other	2,550 <sup>r</sup>	211	4,570 <sup>r</sup>	547	2,450	1	1	44	11,100	121	154
Total	23,400	1,860	78,300	6,890	325,000	3,460	8,670	9,570	389,000	11,400	9,220

<sup>r</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.